Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of Application of)	
NASSAU COUNTY POLICE DEPARTMENT)	File No. 0000400529
And Waiver Request for Waiver for)	
a Public Safety License Pursuant to)	
Section 337 of the Communications Act of)	
1934, as Amended)	

MEMORANDUM OPINION AND ORDER

Adopted: July 12, 2002 Released: July 23, 2002

By the Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. We have before us a request for waiver¹ and associated application² filed by the Nassau County Police Department ("NCPD") for authority to use certain frequencies in its public safety land mobile radio communications system in Nassau County, New York (Nassau County). NCPD seeks a waiver, pursuant to Section 337 of the Communications Act of 1934, as amended (the Act),³ of certain provisions in Part 90 of the Commission's Rules to use frequencies allotted for television (TV) operation. Alternatively, NCPD requests a waiver of the Part 90 rules pursuant to Section 1.925 of the Commission's Rules.⁴ For the reasons stated below, we grant NCPD's Waiver Request pursuant to Section 337 of the Act.

II. BACKGROUND

2. NCPD proposes to construct and operate a new land mobile radio communications system that will operate on frequencies in the 500-506 MHz band (TV channel 19) throughout Nassau County.⁵ The proposed system will consist of four base stations, thirty trunked 12.5 kHz voice channels, five conventional channels for tactical use, and twelve mobile data channels.⁶ Nassau County, located on Long Island and near the center of the New York metropolitan area, borders New York City to the west, Suffolk County to the east, and covers over 285 square miles. NCPD is one of the Nation's ten largest police departments, with over 2,800 officers and approximately 4,000 total staff providing law enforcement and emergency medical services throughout Nassau County.⁷ NCPD's current land mobile

⁴ 47 C.F.R. § 1.925.

¹ Nassau County Police Department Request for Waiver (filed Feb. 28, 2001) (Waiver Request).

² Nassau County Police Department, FCC Form 601, FCC File No. 0000400529 (filed Mar. 1, 2001). *See Waiver Request*, Exhibit D.

³ 47 U.S.C. § 337.

⁵ Waiver Request at 1.

⁶ *Id* at 5

⁷ *Waiver Request* at 2-3.

radio system consists of approximately 2,000 radio units (500 mobile and 1,500 portable) operating on eleven channels in the 477-481 MHz band (TV channel 15).8

- NCPD asserts that implementation of its proposed system is needed to alleviate a serious shortage of radio spectrum and enhance communications used to protect life, health, and property in Nassau County and the surrounding areas. 9 NCPD contends that the spectrum in which it operates its current land mobile radio system is extremely congested. In this connection, it is facing rapidly increasing demands for service and the growing congestion creates high noise levels which, in some instances, have blocked vital police communications. ¹⁰ Moreover, according to NCPD, operations on some of its authorized channels are adversely affected by the operations of a co-channel public safety licensee. 11 NCPD further states that reuse of the existing channels causes operational difficulties within Nassau County's system, impairing critical public safety communications. 12 NCPD notes that its radio system also experiences "dead spots" within its coverage area and that, in recent years, there have been an alarming number of instances wherein deficiencies in its radio system could have placed police officers and other public safety personnel in extreme danger. 13 NCPD additionally states that the current system also lacks the capacity to serve other agencies with which NCPD must communicate on a regular basis. 14 In particular, many towns within Nassau County operate police and fire department communications systems on VHF channels (i.e., 150-174 MHz) or on lower portions of the UHF band (i.e., 421-450 MHz) which are incompatible with radio systems in the 470-512 MHz band on which NCPD, New York City, and other public safety agencies in the area operate. 15 NCPD thus asserts that, in the event of a largescale emergency, e.g., a plane crash, train accident, or large fire, no suitable interoperable communication system would be readily available.¹⁶
- 4. NCPD says its goal is to create a new countywide, multi-agency trunked radio system to address NCPD's congestion and coverage problems, provide capacity for public safety agencies throughout Nassau County, and enhance interoperability. To provide improved interoperability capability in the area, NCPD would include in its proposed system: two interoperability channels for

 $^{^8}$ Id. at 3. The number of total calls for service on NCPD's radio system increased 9.4% from 1998 to 1999, and 11.7% from 1999 to 2000. Id. Total calls in 1998, 1999, and 2000, respectively, were 630,068, 658,990, and 735,798. Id. at n.5.

⁹ *Id*. at 2.

¹⁰ *Id*. at 3.

¹¹ *Id.* at 5-6.

¹² *Id*.

¹³ *Id.* In illustrating dangerous situations, NCPD provides seven specific examples, occurring during the period from March 1998 to January 2001: (1) an officer could not hear transmissions from headquarters while pursuing a crime suspect; (2) an officer could not provide updates while pursuing a bank robbery suspect; (3) radio traffic was severely taxed in vicinity of a two-hour barricade incident; (4) an officer could not call for assistance during an attempt to apprehend a burglary suspect; (5) an officer could not hear due to static and other radio traffic when responding to an accident call; (6) an officer's first three calls for assistance were not answered, with only the fourth call acknowledged; and (7) an officer had great difficulty hearing transmissions from other officers and headquarters during pursuit of a stolen vehicle. *Id.* at 3-4.

¹⁴ *Id*. at 4.

¹⁵ *Id*.

¹⁶ *Id*.

¹⁷ *Id.* at 4-5. *See also* Letter to D'wana R. Terry (*Terry*), Chief, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, FCC, from Robert M. Gurss (*Gurss*), counsel for NCPD (Apr. 30, 2002) (*NCPD April 2002 Letter*).

communications between city and village public safety agencies and NCPD; two channels for interoperable communications with New York City public safety agencies; and two interoperability channels for Nassau County's Emergency Management Office for use at major incidents or events. ¹⁸ Its proposed system is intended to accommodate over 5,000 radios from NCPD and other public safety agencies within Nassau County. ¹⁹ NCPD anticipates that the users of the proposed system will be able to relinquish some of their existing frequency authorizations upon migrating to the new system, which, in turn, would free up frequencies for use by other public safety agencies in the spectrum-congested New York metropolitan area. ²⁰

- 5. The TV Channel 19 frequencies requested by NCPD were allocated for TV broadcast use in 1952.²¹ However, in 1970, the Commission authorized land mobile radio use of certain channels in the TV Channel 14-20 range in certain large urbanized areas.²² Section 90.311 of the Commission's Rules²³ sets forth the specific frequencies that are available within fifty miles of the center of each urbanized area and specifies that TV Channel 19 is allotted to land mobile radio operations in the Philadelphia urbanized area.²⁴ Section 90.307(d) of the Commission's Rules requires base stations to be located at least ninety miles from adjacent channel TV stations.²⁵ Because mobile units must remain within thirty miles of their associated land mobile radio base stations,²⁶ it follows that the mobile units must stay at least sixty miles away from an adjacent channel TV station.²⁷
- 6. NCPD asserts that TV Channels 14-20 are now widely used for public safety land mobile operations in Nassau County and the surrounding New York metropolitan area.²⁸ It states that TV

¹⁸ NCPD April 2002 Letter at 2.

¹⁹ The proposed allotment of radios on the system is: NCPD, 2,200; Volunteer Fire Departments, 1,200; City and Village Police Departments, 800; Emergency Medical Units, 120; Sheriff's Department, 1,300; District Attorney's Office, 100; County Park Rangers, 100; Town Constables, 50. *Waiver Request* at 5.

²⁰ *Id.* In supplementing its request for waiver, NCPD anticipates it could relinquish many of its current frequency assignments, which include 11 UHF voice channels. *NCPD April 2002 Letter* at 2. According to NCPD, this action will provide opportunities for other public safety licensees and will address operational difficulties with co-channel users in the region, *e.g.*, Bergen County, New Jersey. *Id.* While NCPD also expects that other public safety licensees in Nassau County could relinquish many of their existing frequency assignments as they migrate to NCPD's proposed system, it says the actual number of such "give-back" channels is difficult to estimate and is not within NCPD's control. *Id.*

²¹ *Id*. at 13.

²² Amendment Of Parts 2, 89, 91 and 93; Geographic Reallocation Of UHF-TV Channels 14 Through 20 to the Land Mobile Radio Services for Use Within the 25 Largest Urbanized Areas of the United States; Petition Filed by the Telecommunications Committee of the National Association of Manufacturers To Permit Use of TV Channels 14 and 15 by Land Mobile Stations in the Los Angeles Area, Docket No. 18261, *First Report and Order*, 23 FCC 2d 325 (1970) (*UHF/Land Mobile Sharing*).

²³ 47 C.F.R. § 90.311.

²⁴ See 47 C.F.R. § 90.303.

²⁵ 47 C.F.R. § 90.307(d). See 47 C.F.R. §§ 90.305(b), 90.309.

²⁶ See 47 C.F.R. § 90.305(b).

²⁷ We note that the Commission prohibits mobile station operation within 60 miles of an adjacent channel TV station when the associated land mobile radio base station is located closer than the minimum mileage separation requirement. *See* Atlantic Telecommunications, Inc., *Order on Reconsideration*, 16 FCC Rcd 2940, 2941 n.10 (WTB PSPWD 2001), *citing* Private Land Mobile Operations in the 470-512 MHz Band, *Public Notice*, Report No. 20291 (Oct. 22, 1991).

²⁸ *Waiver Request* at 13.

Channel 19, although not allocated for land mobile radio use in the New York metropolitan area, is used in nearby northern New Jersey pursuant to waivers of the 50-mile limitation imposed by Section 90.305 of the Commission's Rules, ²⁹ relative to the Philadelphia TV Channel 19 land mobile radio assignment.

- 7. NCPD notes that its proposed base station locations would be more than fifty miles from the center city coordinates of Philadelphia, Pennsylvania. Thus, NCPD requests a waiver of Section 90.305(a) of the Commission's Rules to use TV Channel 19 in Nassau County as a prerequisite to obtaining a license for its system. Description Specifically, NCPD seeks a waiver to operate its four proposed base stations approximately 100.1 miles, 99.5 miles, 106.9 miles, and 92.2 miles from the center city coordinates of Philadelphia.
- In its request for waiver, NCPD states that the engineering study accompanying the waiver request and letters from the APCO International (APCO) Local Frequency Advisor for Southern New York indicate that, "Public Safety Pool channels have long been exhausted in the New York area." 32 In particular, the letter from the APCO local frequency coordinator states, inter alia, "[u]nfortunately, there are no clear, usable frequencies available in VHF, UHF, or 800 MHz bands. To provide reliable communications for emergency police services throughout the county it is critical that your transmission be free of interference." NCPD observes that there is precedent for its requested waiver of the fifty mile restriction contained in Section 93.305 of the Commission's Rules³⁴ because a substantial number of public safety licensees operate, pursuant to waivers, on TV Channel 19 at sites in northern New Jersey that are more than 50 miles from the geographic center of Philadelphia.³⁵ It states it identified 146 land mobile radio base transmitters in northern New Jersey operating on parts of TV Channel 19, mostly as a result of grants of waivers of Section 90.305(a) of the Commission's Rules. 36 NCPD states that use of TV Channel 19 by land mobile radio licensees in northern New Jersey effectively renders the channel unusable for any future TV station seeking to operate in or near the New York City metropolitan area.³⁷ Additionally, it asserts that TV Channel 19 cannot be used for over-the-air television broadcast operations in New York City because of the new adjacent channel digital television allotment in Newton, New Jersey for Station WMBC-DT, TV Channel 18, and the adjacent channel analog television operation in

²⁹ 47 C.F.R. § 90.305.

³⁰ 47 C.F.R. § 90.305(a)

³¹ These distances were calculated to the center city coordinates of the Philadelphia, PA, urbanized area. *See* 47 C.F.R. § 90.303 for the center city coordinates.

³² Waiver Request at 11, referring to: (a) the engineering analysis performed by Vogel Consulting Group, Inc. See Waiver Request, Exhibit A, "Frequency Availability Study and Analysis of the Use of TV Channel 19 in Nassau County, New York for Public Safety Wireless Applications," Feb., 2001 (Vogel Report) at 1-3; and (b) two letters from a public safety official to NCPD. See Waiver Request, Exhibit B, Letter to Det. Kenneth Strigaro, Nassau County Police, from Vincent R. Stile, APCO Automated Frequency Coordination (Jan. 23, 2001) (First Stile Letter); and Letter to Det. Kenneth Strigaro, Nassau County Police Department – Communications, from Mr. Vincent R. Stile, Corresponding Secretary, RPUC FCC Region 8 (Jan. 31, 2001) (Second Stile Letter).

³³ See First Stile Letter. In addition, the Second Stile Letter states that, regarding "available spectrum in the 821/824 MHz–866/869 MHz radio band that could be used in a countywide Nassau County public safety system . . . there are no available channels that can be used in a countywide application." Second Stile Letter. NCPD notes that this letter was written by Mr. Stile in his capacity as corresponding secretary of the Planning Update Committee of the Region 8 Regional Planning Committee. Waiver Reguest at 11 n.17.

³⁴ 47 C.F.R. § 93.305.

³⁵ Waiver Request at 11.

³⁶ *Id*.

³⁷ *Id*.

Waterbury, Connecticut, Station WTXX-TV, TV Channel 20.³⁸ NCPD argues that, while television operation on Channel 19 is not possible in the New York area, NCPD's proposed use of TV Channel 19 for public safety land mobile radio operations is compatible with both land mobile radio and co-channel and adjacent channel broadcast stations.³⁹ NCPD also contends that its proposed use of Channel 19 will not interfere with other licensees' land mobile radio operations in northern New Jersey.⁴⁰ NCPD requests waiver of Sections 90.303, 90.307, 90.311,⁴¹ and such other Commission rules as may be needed to grant its application, pursuant to Section 337(c) of the Act.

9. NCPD's waiver request was placed on public notice on March 7, 2001.⁴² All parties who filed comments in response to the public notice favored grant of the waiver, although APCO noted that it

³⁸ *Id.* at 7-8. NCPD references the application of Atlantic Coast Communications, Inc. (Atlantic) to modify its low power television (LPTV) broadcast construction permit W19CF to specify operation on Channel 26 at Middle Island, NY. NCPD *Waiver Request* at 8. *See* File No. BMPTTL–20000728AER (filed July 28, 2000). *See also* Section 73.3572 of the Commission's Rules, 47 C.F.R. § 73.3572 (processing of TV broadcast, Class A TV broadcast, low power TV, TV translator and TV booster station applications). NCPD appended a copy of Atlantic's application and supporting engineering statement. *See Waiver Request* at 8 and Exhibit C. Atlantic claims it is precluded from constructing an LPTV station on Channel 19 due to the substantial interference that a Channel 19 TV station would cause to public safety communications systems in northern New Jersey. *Waiver Request, id.* NCPD proffers the Atlantic statement as evidence that a Channel 19 TV station would not be viable in the area.

³⁹ Waiver Request, id. We note that, before NCPD filed its application and Waiver Request, Paxson Communications Corporation, licensee of LPTV Station WPXU-LP, Amityville, New York, filed an application requesting authority to change its assigned channel to Channel 19 (File No. BMPTTL-JG0601AR). This application was filed because WPXU-LP was being displaced from its current TV Channel 38 and seeks to remain on the air by commencing operations on Channel 19. Several public safety licensees in New York and New Jersey, including NCPD, as well as Private Land Mobile Radio Service (PLMRS) licensees, filed petitions to deny. The petitioners asserted that if Paxson's application were granted, public safety and PLMRS licensees in the region would experience harmful interference in up to 92% of their operating areas. Subsequently, the Paxson application was dismissed by the Chief of the Video Services Division of the Mass Media (now Media) Bureau. See Paxson Communications LPTV, Inc., Memorandum Opinion and Order, DA 02-703 (MMB, Vid. Serv. Div. rel. Mar. 25, 2002).

⁴⁰ Waiver Request at 11.

⁴¹ 47 C.F.R. §§ 90.303, 90,307, 90.311.

⁴² Wireless Telecommunications Bureau Seeks Comment On Request For Waiver by Nassau County Police Department To Operate A Public Safety Communications System on 500-506 MHz Frequencies Allocated For Channel 19 Television Operation In The New York Metropolitan Area, Public Notice, 16 FCC Rcd 5309 (WTB PSPWD 2001). We received comments and reply comments, collectively, from Atlantic, Bergen County, New Jersey Police Department, City of Bayonne, New Jersey Police Department ("Bayonne"), and the following entities located and/or operating in Nassau County: Baldwin Fire Department, City of Glen Cove Police Department, City of Long Beach Patrolmen's Benevolent Association, Inc., City of Long Beach Police Department, Floral Park Fire Department, Franklin Square and Munson Fire Department, Freeport Police Department, Garden City Police Department, Hempstead Police Department, Kings Point Police Benevolent Association, Inc., Kings Point Police Department, Lake Success Police Department, Levittown Fire Department, Lido Point Board of Fire Commissioners, Lynbrook Police Department, Malverne Police Department, Metropolitan Transportation Authority, Mineola Detectives Association Incorporated, Mineola Fire Department, Mineola Fire Marshall, NCPD, Municipal Police Chiefs Association, Inc., Nassau County Police Benevolent Association Police Department, North Bellmore Fire Department, Oyster Bay Cove Police Department, Oyster Bay Cove Police Organization, Point Lookout-Lido Fire Department, Port Washington Police Benevolent Association, Inc., Port Washington Police District, Rockville Center Police Department, Sands Point Police Department, Superior Officers Association Police Department, Village of Great Neck Estates Police Department, and Westbury Fire District. We also received ex parte responses, letters, and presentations, collectively, from NCPD, Bayonne, APCO, U.S. Senators Charles E. Schumer and Hillary Rodham Clinton, U.S. Representatives Peter T. King, Carolyn McCarthy, and Gary L. Ackerman, New York State Senators Michael A.L. Balboni and Carl L. Marcellino, and New York State Assemblymen Robert D. Barra, Thomas P. DiNapoli, and Stephen L. Labriola.

would be preferable for applications of the kind at issue here to undergo frequency coordination before being submitted to the Commission.⁴³ On June 6, 2001, representatives of NCPD met with FCC staff to discuss the Waiver Request, and, on June 20, 2001, NCPD provided supplemental information in response to questions raised during the meeting.⁴⁴ Thereafter, FCC staff raised additional questions and, on July 30, 2001, NCPD submitted a supplemental technical analysis regarding operation of its proposed system.⁴⁵

III. DISCUSSION

- 10. NCPD requests a waiver pursuant to Section 337 of the Act, which provides public safety entities with a statutory means of obtaining a waiver of the Commission's Rules to permit them to use frequencies not allocated for public safety use.⁴⁶ Subsection (c)(1) of Section 337 provides as follows:
 - (c) Licensing of Unused Frequencies for Public Safety Services. –
 - (1) Use of unused channels for public safety services. Upon application by an entity seeking to provide public safety services, the Commission shall waive any requirement of this Act or its regulations implementing this Act (other than its regulations regarding harmful interference) to the extent necessary to permit the use of unassigned frequencies for the provision of public safety services by such entity. An application shall be granted under this subsection if the Commission finds that--
 - (A) no other spectrum allocated to public safety services is immediately available to satisfy the requested public safety service use;
 - (B) the requested use is technically feasible without causing harmful interference to other spectrum users entitled to protection from such interference under the Commission's regulations;
 - (C) the use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made;
 - (D) the unassigned frequency was allocated for its present use not less than 2 years prior to the date on which the application is granted; and
 - (E) granting such application is consistent with the public interest.⁴⁷

Atlantic's support of NCPD's request was conditioned on Commission approval of Atlantic's application. Atlantic Comments at 2. Subsequently, Atlantic's application was granted on March 23, 2001. See Public Notice, Broadcast Actions, Rpt. No. 44951, rel. Mar. 28, 2001. Therefore, because Atlantic's application has been granted, we conclude that Atlantic now unconditionally supports NCPD's request for waiver. When Bayonne filed its application, it first submitted it to APCO for frequency coordination. APCO contends that, as a consequence of the time required for coordination, the Bayonne application reached the Commission after NCPD's application and Waiver Request had been filed. See APCO ex parte letter, Attachment 1 hereto. APCO notes that, under the rules and policies covering applications accompanying Section 337(c) requests for frequencies in the service category in question, frequency coordination is not required. However, it submits that applicants for TV Channel 19 frequencies in the area conventionally have employed frequency coordination in an effort to avoid interference. Therefore, APCO urges the Commission to review its processes concerning applications filed with Section 337(c) requests and to consider whether to impose a frequency coordination requirement. See id. We note APCO's request, but observe that it is outside the scope of this proceeding and more appropriately would be raised in the context of a rule making proceeding. See 47 C.F.R. § 1.399 et seq.

⁴⁴ See Letter to Terry from Gurss (June 20, 2001) and appended attachments.

⁴⁵ See Letter from Terry to Gurss (July 30, 2001) and an attachment, Reply to FCC Request for Information prepared by Vogel (Vogel Supplementary Report).

⁴⁶ See 47 U.S.C. § 337.

⁴⁷ 47 U.S.C. § 337(c)(1).

- 11. When considering requests under Section 337, we first must determine whether the applicant is an "entity seeking to provide public safety services." The statute describes public safety services as services that are provided by state or local government entities or by non-governmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services. NCPD is a local governmental agency, the principal purpose of which is the protection of life, health, and property, and which does not make its services commercially available to the public. NCPD states that the radio frequencies sought in its request will be for "public safety services," as defined by Section 337 of the Act. Based on the information before us, we conclude that NCPD is an entity seeking to provide, and, in fact, providing public safety services. We further conclude that NCPD's sole or principal purpose is to protect the safety of life, health, and property and that it will not make services on the frequencies requested commercially available to the public. Therefore, we find that NCPD satisfies the eligibility criteria established by Section 337(c)(1).
- 12. We now turn to whether NCPD has met the statutory criteria for grant of a waiver under Section 337(c)(1) of the Act. The plain language of subsection (c) provides that a waiver request under this section shall be granted only upon a finding that all of the following five conditions are met regarding the spectrum specifically sought by an applicant. Where any one of the five conditions is not met, the subject waiver will not be granted. As discussed in greater detail *infra*, we find that all five criteria required by Section 337(c)(1) are met with respect to NCPD's request for waiver.
- 13. Criterion One: No other spectrum allocated to public safety services is immediately available to satisfy the requested public safety service use.⁵⁴ NCPD has provided an engineering study and letters from a FCC-certified frequency coordinator and from the pertinent 800 MHz Regional Planning Committee indicating that there are no VHF, UHF, or 800 MHz public safety frequencies available for NCPD's proposed use.⁵⁵ The Commission has accepted similar documentation in other cases as sufficient evidence of the unavailability of other public safety spectrum.⁵⁶ With respect to the public safety spectrum allocated in the 700 MHz band, we conclude that this spectrum is not "immediately available" to NCPD because the 700 MHz General Use channels may be assigned only

⁴⁸ *Id.* Section 337(f) defines the term "public safety services" as "services –

⁽A) the sole or principal purpose of which is to protect the safety of life, health, or property;

⁽B) that are provided –

⁽i) by the State or local government entities; or

⁽ii) by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services; and

⁽C) that are not made commercially available to the public by the provider."

⁴⁹ 47 U.S.C. § 337(c)(1)(B).

⁵⁰ Waiver Request at 10. NCPD is a public agency providing both law enforcement and emergency medical services throughout Nassau County. *Id.* at 2-3.

⁵¹ 47 U.S.C. § 337(f)(1)(C).

⁵² Waiver Request at 10.

⁵³See 47 U.S.C. § 337(c)(1). See also South Bay Regional Public Communications Authority, Memorandum Opinion and Order, 13 FCC Rcd 23781, 23796 (1998) ¶ 33 (South Bay); Implementation of Sections 309(j) and 337 of the Communications Act of 1934, as Amended, Report and Order and Further Notice of Proposed Rulemaking, WT Docket No. 99-87, 15 FCC Rcd 22709, 22769 (2000) ¶ 132.

⁵⁴ 47 U.S.C § 337(c)(1)(A)

⁵⁵ See First Stile Letter and Second Stile Letter.

⁵⁶ See, e.g., South Bay, 13 FCC Rcd at 23796; County of San Mateo, California, Memorandum Opinion and Order, 14 FCC Rcd 19002 (WTB 1999) (San Mateo).

after the Commission approves a regional plan developed by the appropriate regional planning committee. To date, no such plan has been submitted or approved for the region to which NCPD belongs.⁵⁷ Moreover, the 700 MHz spectrum is currently not immediately available due to the presence of multiple television stations or allotments on Channels 60-69 in or near the New York Metropolitan area.⁵⁸ Based on our analysis of the information NCPD has submitted, we conclude that NCPD has shown that no other public safety spectrum is immediately available in the area sought by NCPD.

- 14. Criterion Two: The requested use is technically feasible without causing harmful interference to other spectrum users entitled to protection from such interference under the Commission's regulations.⁵⁹ There are two issues to be considered with respect to harmful interference from NCPD's proposed system: (1) whether NCPD's base stations would create harmful interference within the service areas of nearby TV Channel 18, 19 and 20 broadcast stations; and (2) whether harmful interference would result when NCPD portable and mobile radios were operated within the service areas of such TV stations. As discussed in further detail *infra*, we conclude that NCPD's proposed system could be accommodated without causing harmful interference to other spectrum users entitled to protection.
- 15. In its request for waiver as originally filed, NCPD asserted that its base stations would cause negligible interference to TV Channel 18, 19 and 20 broadcast stations. ⁶⁰ It submitted an initial and then a supplemental engineering study showing the location of all TV broadcast stations operating on Channels 18, 19, and 20 in the vicinity of Nassau County. ⁶¹ In its initial study, NCPD used a terrain profiling method to demonstrate that the base stations of its proposed system would not cause harmful interference to analog TV Stations WCDC-TV (Channel 19), Adams, Massachusetts, ⁶² and WTXX-TV (Channel 20), Waterbury, Connecticut. ⁶³ NCPD also indicated that its proposed base stations would cause negligible increased interference to DTV Station WMBC-DT (Channel 18), Newton, New Jersey. ⁶⁴ NCPD makes this assertion based on its assumption that numerous sources of adjacent channel interference currently exist which would prevent the reception of an interference-free DTV Channel 18 signal in Nassau County. ⁶⁵ In its supplemental study, ⁶⁶ NCPD applied a more rigorous technical analysis of potential interference to Station WBMC-DT and demonstrated that there would be no harmful interference to the station because the signals from NCPD's proposed base stations would not exceed the adjacent channel -23 dB desired to undesired (D/U) signal ratio specified in Section 90.545(a)(2) of the Commission's Rules. ⁶⁷

⁵⁷ See DuPage Public Safety Communications, Memorandum Opinion and Order, 16 FCC Rcd 12394, 12397-98 (WTB PSPWD 2001) ¶ 34.

⁵⁸ See 47 C.F.R.§ § 73.606(b), 73.622(b).

⁵⁹ 47 U.S.C § 337(c)(1)(B)

⁶⁰ Waiver Request at 11-12.

⁶¹ Vogel Report at 3-4.

⁶² *Id.* at 12-13.

⁶³ *Id.* at 5-6.

⁶⁴ Vogel Report at 11.

⁶⁵ *Id.* NCPD lists an existing low power TV station, WEBR-LP, Channel 17, New York City, NY, and existing land mobile stations operating on Channel 19 in northern New Jersey as potential sources of interference to DTV Station WMBC-DT. *Id.*

⁶⁶ See Vogel Supplemental Report.

 $^{^{67}}$ See 47 C.F.R. § 90.545(a)(2). For adjacent channel protection, the desired DTV signal to undesired land mobile signal (D/U) ratio is –23 dB at the 41 dB μ F(50,90) contour. *Id.* Section 90.545(a)(2) was promulgated to protect UHF DTV stations from interference by land mobile radio stations operating on the 700 MHz band. See The

- 16. NCPD claims that its proposed portable and mobile units will not cause interference to television stations because, with one exception, the coverage contours of area television stations do not extend into Nassau County where such mobiles and portables will operate. The one exception, according to NCPD, is the digital allotment, Station WMBC-DT, for Channel 18, whose calculated 41 dB μ F(50,90) contour extends over a small area in the northwest portion of Nassau County. NCPD contends that any interference from mobile or portable units in this small area would be "de minimis" because interference to Station WMBC-DT would be present only 0.065 percent of the time when NCPD's mobile units would be active.
- 17. We agree with NCPD's claim that its proposed land mobile system will cause no harmful interference to protected full service TV facilities. With respect to Station WCDC-TV, Adams, Massachusetts, we find that Nassau's proposed base stations and mobile units operating within the county will satisfy the required spacing criteria of Section 90.307 of the Commission's Rules. With respect to DTV Station WMBC-DT, Newton, New Jersey, we have evaluated the terrain between WMBC-DT and Nassau County. We have determined that, because of terrain obstruction, Station WMBC-DT will not provide 41 dBu F(50,90) service to Nassau County. Consequently, NCPD's proposed base stations and mobile units operating within the county will cause no harmful interference to WMBC-DT. Furthermore, with respect to Station WTXX-TV, Waterbury, Connecticut, we have evaluated the terrain between Station WTXX-TV and Nassau County. We have determined that, because of terrain obstruction, Station WTXX-TV will not provide Grade B service to Nassau County. Consequently, NCPD's proposed base stations and mobile units operating within the county will cause no harmful interference to Station WTXX-TV.
- 18. We have also determined that Nassau's proposed land mobile system will cause no harmful interference to any existing low power⁷⁰ or Class A TV facilities.⁷¹ In sum, we conclude that no TV station would be caused harmful interference from NCPD's base stations, mobile units or portable units provided mobile units and portable units operate within the range of the base stations covered by this waiver. Therefore, we conclude that NCPD has satisfied the requirement in Section 337(c)(1)(B) that it cause no harmful interference to existing stations entitled to protection.⁷²
- 19. Criterion Three: The use of the unassigned frequency for the provision of public safety services is consistent with other allocations for the provision of such services in the geographic area for which the application is made. As NCPD notes, the 470-512 MHz band already is a principal band for public safety operations in Nassau County and the surrounding New York metropolitan area, and the frequencies 500-506 MHz are currently used for public safety operations in the surrounding New York

Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010; Establishment of Rules and Requirements For Priority Access Service, WT Docket No. 96-86, *First Report and Order and Third Notice of Proposed Rulemaking*, 14 FCC Rcd 152, 221-23 (1998) ¶¶ 153-55 (*First R&O and Third NPRM*). We believe, however, that the minimum D/U ratios specified for the 700 MHz band in Section 90.545(a)(2) are also appropriate here.

⁶⁸ See Vogel Supplemental Report at 4.

⁶⁹ 47 C.F.R. § 90.307.

⁷⁰ See Subpart G of Part 74.

⁷¹ See Subpart J of Part 73.

⁷² We note that should NCPD increase the power or antenna height of any of its base stations, add new base stations, or relocate any of its base stations, a new interference study and waiver request would be required.

⁷³ 47 U.S.C § 337(c)(1)(C).

⁷⁴ See \P 6 supra.

metropolitan area.⁷⁵ Considering the extensive public safety use of the 470-512 MHz band, we conclude that NCPD's use of the requested frequencies would be consistent with the Commission's prior public safety allocations in this geographic area.⁷⁶

- 20. Criterion Four: The unassigned frequencies were allocated for their present use not less than two years prior to the date on which the application will be granted. The subject frequencies were allocated for broadcast television operations in 1952. Hence, they were allocated for their present use TV broadcasting substantially more than two years ago. We also note that the 470-512 MHz portion of the TV broadcasting band was allocated for shared use with land mobile systems in 1970. Hence, TV broadcasting and land mobile sharing was allocated substantially more then two years ago. Finally, we note that DTV broadcasting was allocated in the TV broadcast band in 1997. Thus, NCPD has demonstrated that it meets this criterion.
- Criterion Five: Granting the application is consistent with the public interest. 81 In its 21. request for waiver and through the comments received from numerous public safety agencies in the affected region, we find that NCPD has made a compelling case that a grant of its waiver request is in the public interest. As described by NCPD, and supported by commenters operating both within and outside of Nassau County, public safety communications in the New York City and Long Island area are limited because of the lack of available frequencies.⁸² Accordingly, NCPD is in immediate need of additional frequencies for public safety use. NCPD has identified specific instances in which the inadequacy of its current communications system has potentially placed the safety of police officers and other public safety personnel at risk.⁸³ Further, we believe that NCPD's proposal will promote interoperability both within Nassau County and with other public safety entities in the New York metropolitan area. In addition, we believe that some relief from frequency congestion in the area will be achieved through NCPD's proposal to "give back" certain of its existing frequencies after it migrates to the proposed 500-506 MHz countywide system. In short, granting NCPD's waiver request would alleviate serious spectrum congestion in the New York City metropolitan area. Moreover, we are mindful that granting the request will enable NCPD to carry out critical and urgent missions in a way that ensures more effective and efficient service to Nassau County and provides a safer environment for emergency responders. Thus, we find that granting the Waiver Request appears essential to assist NCPD in fulfilling its responsibilities, and therefore is consistent with the public interest.

IV. CONCLUSION

22. We find that NCPD's *Waiver Request* satisfies the criteria under Section 337(c) of the Act to obtain a grant of its application to use frequencies allotted for TV operation. We therefore grant NCPD's Waiver Request.

⁷⁵ *Vogel Report* at 8-9.

⁷⁶ See, e.g., San Mateo, 14 FCC Rcd at 19002.

⁷⁷ 47 U.S.C § 337(c)(1)(D).

 $^{^{78}}$ See \P 5 supra.

⁷⁹ See UHF/Land Mobile Sharing, supra.

⁸⁰ See Advanced Television Systems and Their Impact upon the Existing Television Service, Sixth Report and Order, MM Docket No. 87-268, 12 FCC Rcd 14588 (1997).

^{81 47} U.S.C. § 337(c)(1)(E).

⁸² See ¶ 13 and n.7 supra.

⁸³ See n.13 supra.

V. ORDERING CLAUSES

- 23. ACCORDINGLY, IT IS ORDERED, pursuant to Section 4(i) and 337(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 337(c), that the *Waiver Request* filed by Nassau County Police Department on February 28, 2001, IS GRANTED.
- 24. IT IS FURTHER ORDERED that the application, FCC File No. 0000400529, filed by the Nassau County Police Department on March 1, 2001, and associated with the *Waiver Request*, SHALL BE REFERRED to the Licensing and Technical Analysis Branch, Public Safety and Private Wireless Division for processing consistent with this *Memorandum Opinion and Order*.
- 25. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

D'wana R. Terry Chief, Public Safety and Private Wireless Division Wireless Telecommunications Bureau